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16. A new Genus and new Species and Subspecies of Mammals from Little Namaqualand and the North-West Cape Province; and a new Subspecies of Gerbillus paeba from the Eastern Cape Province.—By G. C. SHORTRIDGE, Director, Kaffrarian Museum, King William's Town. (In collaboration with DONALD CARTER, Assistant Curator of Mammals, American Museum of Natural History.)

THIS is the first report on the Cape Museums' Mammal Survey of the Cape Province. Owing to generous financial co-operation on the parts of the Museum of Comparative Zoology (at Harvard University), the South African Museum, the Natal Museum, the Cape Provincial Museums (at Grahamstown, Kimberley, Port Elizabeth, King William's Town, and East London), the Research Grant Board of the Union of South Africa, and Dr. H. Merensky, it has been possible to undertake, by means of two expeditions, a systematic mammal survey of (1) the whole of Little Namaqualand, and (2) the northern part of the Western Cape Province.

The preliminary scientific results of this mammal survey of the Cape Province include the determination of a new genus of Golden Moles, and the discovery of no less than three genera of mammals, *Platymops, Gliriscus*, and *Petromyscus*, that were not known previously to occur in the Cape Province.

An unexpected discovery is that of an alpine form of Bathyergus, a genus hitherto thought to be restricted to coastal sand-dunes, on the highest plateau of the Kamiesberg.

Besides the new forms herein described, further additions to the Cape Mammal Fauna include two South-West African Bats, *Cistugo seabrae* and typical *Platymops haagneri*; whilst the re-discovery in the Cape Province of the rare *Eptesicus megalurus*, after nearly a hundred years, is of considerable zoological interest.

No Mammal Survey of Little Namaqualand had been carried out since the Rudd Expedition in 1903, when Mr. C. H. B. Grant collected in the region between Port Nolloth and Klipfontein in the northwestern part of that territory.

Memorable results of the Rudd exploration included the discoveries of *Bathyergus janetta* and *Herpestes ruddi*, both of which were figured VOL. XXXII, PART 4. 21

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in the Proceedings of the Zoological Society of London (1904, vol. i, pl. vi).

The number of mammals already collected totals just over 3700 specimens, and full reports on the results of the expeditions, together with field notes and short topographical details of the camping-places, will be published in due course.

# Fam. VESPERTILIONIDAE.

# Scotophilus angusticeps sp. n.

Two specimens  $\mathfrak{P}$  from near Citrusdal.

General colour above drabby umber-brown (rather as in *Eptesicus capensis*), without gloss or sheen; below light drabby brown, centre of abdominal and anal regions strongly washed with rufous, throat tinged with sienna-brown; base of fur, above and below, dark seal-brown; ears and flying membranes dusky black.

Type (in the Kaffrarian Museum).—Adult female, original number 1937, collected 28th December 1937 at Hex River Estate, 10 miles north of Citrusdal, N.W. Cape Province.

Co-type.—Adult female, original number 3308, collected 3rd January 1938.

Dimensions of Type and Co-type.—H. and b., 77 (74); tl., 58 (57); hf., 12 (11.5); ear, 18 (17.5); forearm, 53 mm.

Skulls.—Total length, 20; basal length, 17 (17·2); zygomatic width, 13·5; width of brain case, 10 (9·5); interorbital constriction, 4·5; length of palate, 9; upper dental series (from front of canine), 7 (7·5); lower dental series (from front of canine), 7·5 (8); mandible, 16 (15·5); height of brain case, 7·5 mm.

Skull flatter, less massive and with a markedly narrower zygomatic width than in S. nigrita dingaani or S. n. herero; cranially S. n. herero is in some respects intermediate between S. n. dingaani and S. angusticeps, although much more closely resembling the former.

### Fam. MOLOSSIDAE.

# Platymops (Sauromys) haagneri umbratus subsp. n.

One specimen from Kliphuis, northern spur of the Cedarberg.

A Cape subspecies of *P. haagneri*, distinguished by its dark coloration.

Colour above smoky seal-brown, a shade paler than in Nyctinomous bocagei; under surface smoky-brown, several shades lighter than the

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upper surface; ears and flying membranes almost black—as opposed to comparatively pale horn-brown in typical *haagneri*.

In typical *haagneri* (series from Goodhouse, lower Orange River, examined, and a single specimen from Berseba, Great Namaqualand) the colour above is drabby brown, paler and less cinereous than the under surface of *umbratus*, and pale buffy, approaching whitish, below.

Type (in the Kaffrarian Museum).—Adult male, original number 2827, collected 7th December 1937 at Kliphuis, Pakhuis Pass, 11 miles N.E. of Clanwilliam, N.W. Cape Province.

Dimensions of Type.—H. and b., 61; tl., 31; hf., 8.5; ear, 15; forearm, 37 mm.

Skull.—Basal length, 16·2; zygomatic width, 10; width of brain case, 9; interorbital constriction, 3·7; length of palate, 5·5; upper dental series (from front of canine), 6; mandible, 12·5 mm.

Genus new to the Cape Province.

# Fam. MACROSCELIDIDAE.

### Macroscelides typicus isabellinus subsp. n.

One specimen from Port Nolloth (near township).

A markedly pale form of *Macroscelides typicus*.

Upper parts pale ashy-buff with only the faintest peppering caused by dusky tips to the hairs; underparts white; tail buffy, bristles on terminal half black above and below; hands and feet pale buff; ears blackish, as in the other local race of *typicus*.

*Type* (in the Kaffrarian Museum).—Adult male, original number 1821, collected 3rd February 1937 at Port Nolloth (close to the sea).

Dimensions of Type.—H. and b., 114; tl., 122; hf. (s.u.), 36.5; ear, 25 mm.

Skull.—Greatest median length, 33; basal length, 27.5; zygomatic width, 20.5; width of brain case, 15.5; interorbital constriction, 6; width across inflations, 18; length of nasals, 11; upper dental series (including incisors), 16; lower dental series (including incisors), 15; mandible, 25 mm.

I am regarding this specimen as representing a desert subspecies, like the pallid coastal races of other mammals peculiar to the South-West African Namib.

Four other specimens from the Port Nolloth hinterland (only 10-15 miles inland) are indistinguishable from specimens provisionally referred to *P. t. typicus* from other parts of Little Namaqualand.

# Fam. CHRYSOCHLORIDAE.

# Cryptochloris gen. nov.

Type Cryptochloris zyli sp. n.

Size and shape of body foreshortened as in *Eremitalpa*, but with relatively short, iridescent fur.

Claws of forefoot well developed and equal respectively in size to those of *Eremitalpa*.

Skull, with 40 teeth in all, approaching that of *Chrysochloris*, but interorbital region more expanded.

### Cryptochloris zyli sp. n.

A small rather dark coloured Golden Mole, similar in form to *Eremital pa granti*, but with relatively short fur, as in *Chrysochloris*. One specimen from near Lamberts Bay.

General colour above drabby lead colour washed with an inky violet iridescence. Underparts drabby lead colour, hardly paler than above. Base of fur dark slate throughout. A slight admixture of pale hairs between the whitish-buff face markings—which are well defined, as in *Chrysochloris asiatica*.

*Type* (in the Kaffrarian Museum).—Adult male, original number 3477, collected 13th January 1937 at Compagnies Drift, 10 miles inland from Lamberts Bay, North-Western Cape Province.

Dimensions of Type.-H. and b., 82; hf., 12 mm.

Skull.—Greatest length, 22; basal length, 17.5; greatest breadth, 15.5; interorbital breadth, 8.5; greatest height, 11; dental series (front of incisors to back of posterior molar), 10; palate (across posterior molars), 8 mm.

Chrysochloris wintoni Broom should apparently be assigned to this genus.

I have named this very distinct Golden Mole, the type of a new genus, in honour of Mr. Gideon van Zyl, Compagnies Drift, to whom I am indebted for much assistance during my visit to Lamberts Bay.

## Chrysochloris concolor sp. n.

Two specimens 39 from Nieuwoudtville and Traveller's Rest (15 miles N.E. of Clanwilliam).

A silvery drab Golden Mole, much resembling pale individuals in a series of C. *namaquensis* from the Kamiesberg, but without any trace of greenish or violet reflections.

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Upper parts pale drab with a satiny sheen; underparts pale drab washed with greyish white; base of fur dusky slate throughout; whitish buff cheek markings like those of C. asiatica, but with a more profuse admixture of whitish hairs above snout.

*Type* (in the Kaffrarian Museum).—Adult male, original number 2500, collected 10th November 1937, 3 miles west of Nieuwoudtville, N.W. Cape Province.

Dimensions of Type.-H. and b., 110; hf., 13 mm.

Skull.—Greatest length, 23.5; basal length, 18; greatest breadth, 17.5; greatest height, 12; interorbital breadth, 8.5; palate (across posterior molars), 9; dental series (front of incisors to back of posterior molar), 10.5 mm.

### Fam. PROTELIDAE

### Proteles cristatus canescens subsp. n.

Specimens from Eselfontein, Witwater, Eenriet, and Port Nolloth (Little Namaqualand); Kliphuis and Klaver (N.W. Cape Province); and from Oas and Sandfontein (South-West Africa—Gobabis Dist.).

A long-haired, uniformly dark grey race of P. cristatus, heavily grizzled throughout.

General colour above iron-grey, individual hairs strongly annulated; flanks similar in colour to dorsal crest, which tends to become tipped with black on the rump only; black bands on flanks relatively ill defined, owing to a profuse overlapping of long grizzled-grey hairs; buttocks faintly washed with brownish rufous; head dusky, speckled with buff; blackish region above almost bare muzzle three times as wide as in typical cristatus (specimens from Kaffraria). Underparts buffy, tinged with rufous; tail, individual hairs grey at base, tipped with black; end of tail heavily blackened; forefeet black above, the black extending outwardly 6 inches along the forearm; hindfeet black above, thighs mottled (not striped) with black; ears, outside black, narrowly but conspicuously edged with buff, inside whitish.

*Type* (in the Kaffrarian Museum).—Adult male, original number 1048, collected 11th December 1936 at Eselfontein (Kamiesberg), Little Namaqualand.

Dimensions of Type.—H. and b., 700; tl., 270; hf. 154; ear, 103 mm.

Skull.—Total length, 136.5; basal length, 130.5; palate, 71.5; nasals, 37; zygomatic width, 85; width of brain case, 48; greatest length of mandible, 101 mm.

In a specimen from Witwater (Kamiesberg) with worn fur and only scattered long hairs on the flanks the side stripes contrast almost as in typical *cristatus*, and the dorsal crest is tipped with black throughout its length.

In two specimens, from Port Nolloth and Eenriet, the hairs of the dorsal crest are everywhere uniform grizzled grey like the flanks.

In two newly born puppies, from Sandfontein and Klaver, the dorsal lines and tails are entirely black, all individual hairs being black from the base.

The approximate range of P. c. canescens appears to be the Western Cape Province and South-West Africa—to at least as far north as the Tropic of Capricorn.

Two specimens from the Kaokoveld (the extreme north-west of S.W. Africa), referred to P. c. harrisoni of Angola, approach typical *cristatus* in general coloration, the flanks being rich buffy, contrasting with the grizzled dorsal crest.

### Fam. MUSCARDINIDAE.

#### Gliriscus rupicola australis subsp. n.

Two specimens  $\Im$  from Eenriet; a third specimen (in alc.) since received from Port Nolloth.

A southern subspecies of G. rupicola with a uniformly whitish tail below as well as above.

General coloration above a shade paler than in typical *rupicola*, this being especially marked on the forehead; under surface also paler, the ends of the hairs being more profusely white; tail paler throughout, the individual hairs, below as well as above, more uniformly tipped with white than in either of the two South-West African subspecies; hands and feet white; colour of ears and ocular markings as in typical *rupicola* and *r. montosus*.

*Type* (in the Kaffrarian Museum).—Adult female, original number 1522, collected 19th January 1937 at Eenriet, Little Namaqualand.

Co-type.—Adult male, original number 1320, collected 12th January 1937.

Dimensions of Type.—H. and b., 115; tl., 86 (105 in co-type) hf. (s.u.), 22; ear, 19 mm.

Skull.—Total length, 32; basal length, 24; zygomatic width, 17.5; width of brain case, 15; interorbital constriction, 5; length of palate, 9.5; upper dental series, 4; lower dental series, 3.7; mandible (excluding incisors), 15 mm. G. r. montosus from Brukaros Mountain, Great Namaqualand, the darkest of the three races, with drabby feet, separates geographically this slightly larger-eared Cape form from G. r. rupicola of Damaraland.

Genus new to the Cape Province.

## Fam. MURIDAE.

### Taterona brantsi namaquensis subsp. n.

Three specimens  $\mathfrak{JJ} \ \mathfrak{P}$  from Goodhouse, south bank of the lower Orange River.

A desert-coloured race of Taterona brantsi.

T. b. namaquensis from the north of Little Namaqualand agrees closely in colour with T. b. perpallida from the Kalahari and Ngamiland, but the pale, crescentic, somewhat shadowy ocular markings are almost if not entirely absent. The uniform coloration of the head thus serves to distinguish namaquensis from the geographically distant perpallida.

General colour above pale sandy buff, slightly grizzled, below white; tail pale speckled sandy buff above, white below; in two out of three specimens (including the type) the terminal third of the tail is white above; ears sandy buff, not differing in shade from the head; hands and feet buff-white.

*Type* (in the Kaffrarian Museum).—Adult female, original number 1088, collected 23rd December 1936 at Goodhouse (Raman's Drift), Lower Orange River.

Dimensions of Type.-H. and b., 126; tl., 167; hf. (s.u.), 34; ear, 21 mm.

Skull.—Total length, 36; basal length, 28; length of palate, 15; zygomatic width, 18.5; length of nasals, 15; upper molar and premolar series, 5.5; lower molar and premolar series, 6; mandible (exclusive of incisors), 20 mm.

The range of T. b. namaquensis is separated from that of T. b. perpallida by the whole of Great Namaqualand, in which no species of Taterona has yet been discovered.

## Poemys melanotis insignis subsp. n.

Specimens from Eselfontein.

A small, silvery grey, narrowly striped form of P. melanotis without any trace of ocular markings, but with a dark frontal patch, almost as well defined as in P. nigrifrons. General colour above pale drab grey, closely approximating in shade to that of P. m. capensis (typically from Wolseley, C.P.): black dorsal stripe narrow, extending as far forward as in a specimen I refer to P. m. melanotis from the Pirie Forest; a conspicuous dusky black frontal patch; ocular markings obsolete; underparts drabby white; ears dusky, not so dark as in typical melanotis; tail drab grey above and below; hands and feet white.

Type.—Adult female, original number 843, collected 27th November 1936 at Eselfontein, Kamiesberg.

Dimensions of Type.—H. and b., 70; tl., 75; hf. (s.u.), 16.5; ear, 17.5 mm.

Skull.—Greatest length, 20.5; basilar length, 16; zygomatic width, 10.5; width of brain case, 9.5; interorbital constriction, 3.5; length of upper molars, 3.3 mm.

This Namaqualand form of *Poemys melanotis* may prove to be restricted in range to the Kamiesberg.

# Petromyscus barbouri sp. n.

Specimens from Witwater, Platbakkies, Eselfontein, and Eenriet.

A small drab grey *Petromyscus*, at once distinguishable from all other members of the genus by its bicoloured tail.

General colour above grizzled drab grey (about as in *Mus musculus*); underparts white; tail markedly bicoloured, drab grey above, white below; hands and feet white; ears drab grey. Mammae 4 (ing.); no pectoral mammae.

*Type* (in the Kaffrarian Museum).—Adult male, original number 253, collected 20th October 1936 at Witwater (Kamiesberg), Little Namaqualand.

Co-type. Adult female, original number 146, collected 11th October 1936.

Dimensions of Type.—H. and b., 78; tl., 80; hf. (s.u.), 19; ear, 14 mm.

Skull.—Total length, 23; basal length, 17.3; zygomatic width, 11 approximately (of co-type 11); width of brain case, 11; interorbital constriction, 4; length of palate, 9.2; upper molar and premolar series, 3.5; lower molar and premolar series, 3.5; mandible (exclusive of incisors), 11.5 mm.

This rather short-tailed species of *Petromyscus*, the most southern representative of the genus, approaches the relatively long-tailed *P. shortridgei*, the largest and most northern representative, most closely in colour; but it is drabby cinereous instead of umber brown. It may further be noted that in P. shortridgei the two pectoral mammæ are also usually but not invariably absent, whereas they are present in all females of the P. collinus group collected, as well as in the only known female of P. monticularis.

P. monticularis, which occurs in association with P. collinus bruchus on Brukaros Mountain (Great Namaqualand), may be distinguished from all of the other species by its short ears and relatively thick tail.

Genus new to the Cape Province.

The genus *Petromyscus* and all of its previously known species and subspecies were discovered by myself in South West Africa.\*

To these may now be added *Petromyscus barbouri* and *P. collinus capensis*, both from Little Namaqualand.

I am naming the above strikingly distinct new species in honour of Dr. Thomas Barbour, Director of the Museum of Comparative Zoology, Harvard University, who is so generously contributing towards and associating himself with the Cape Museums Mammal Survey of the Cape Province.

## Petromyscus collinus capensis subsp. n.

Two specimens 33 from Goodhouse, northern Little Namaqualand. A brownish-chestnut form of *P. collinus*, approaching the typical Damaraland subspecies in colour, but separated from it by the darker *P. collinus bruchus* of Great Namaqualand. Characterised by a markedly hairy tail, the individual bristles being twice the length of those in *collinus* and *bruchus*.

General colour above brownish chestnut; underparts white; tail pale drabby, slightly darker above and still more so terminally (above and below) owing to a thick pencilling of relatively long dusky bristles; ears dusky brown, not tinged with rufous as in *collinus* and *bruchus*; hands and feet buffy white.

*Type* (in the Kaffrarian Museum).—Original number 1223, collected 5th January 1937 at Goodhouse (Raman's Drift), lower Orange River—south bank.

Dimensions of Type and Co-type.—H. and b., 87 (90); tl., 99 (98); hf. (s.u.), 17 (17); ear, 16.5 (17) mm.

Skulls.—Total length, 26.5 (26); basal length, 20 (19); zygomatic

\* P. shortridgei, typically from the Kaokoveld, has since been found to extend into S.-W. Angola.

width, 12 (12.5); width of brain case, 13.5 (12); interorbital constriction, 4.5; length of palate, 11.5 (10.5); upper molar and premolar series, 3.5; lower molar and premolar series, 3.5; mandible (exclusive of incisors), 13 mm.

The Orange River Valley presumably constitutes the southern limit of the range of P. collinus and its subspecies, the genus being represented farther south in Little Namaqualand by P. barbouri.

## Fam. BATHYERGIDAE.

#### Bathyergus janetta inselbergensis subsp. n.

Specimens from Eselfontein, Kamiesberg.

This mountain race of *Bathyergus janetta* differs from the typical coastal subspecies in the general colour above being silvery buff instead of drab grey, and thus the seal-brown dorsal and occipital area, together with the dark forearms and thighs, contrasts much more sharply with the flanks, which have an almost frosty appearance.

The tail hairs (above) are slaty black basally instead of pale brown, and buff-white terminally; the hairs on the forefeet are whiter, less soiled looking, than in typical *janetta*.

*Type* (in the Kaffrarian Museum).—Adult female, original number 977, collected 4th December 1936 at Eselfontein, Kamiesberg (altitude 4400 ft. approx.).

Dimensions of Type.—H. and b., 230; tl., 44; hf., 45 mm. Of a large male (without skull), h. and b., 280; tl., 52; hf., 51 mm.

Skull.—Total length, 50.5; basal length, 44; zygomatic width, 33; width of brain case, 19.5; interorbital constriction, 9; upper molar and premolar series, 10; lower molar and premolar series, 10.5; mandible (excluding incisors), 39.5 mm.

The discovery of *Bathyergus* in the Kamiesbergen at an altitude of between 4000 and 5000 ft. was unexpectedly interesting, previously known forms being only known to occur in low-lying coastal sandplains.

### Fam. MURIDAE.

#### Gerbillus paeba exilis subsp. n.

Three specimens  $33^{\circ}$  from Alexandria District (coast), Cape Province.

A remarkably pallid race of G. paeba with fawn-white flanks, white ocular rings and a white tail tip.

General colour above pale rufous fawn; flanks still paler, shading

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to white; cheeks and ring above eye white; underparts white; tail very pale fawn above, white below, tail tuft white; hands and feet white; ears pale fawn.

In the type and co-type there is no trace of dusky tips to the hairs anywhere, but in a third specimen (original No. 102X—in the Albany Museum) the dorsal region has a smoky appearance due to a slight darkening of the ends of the hairs.

*Type* (in the Albany Museum).—Adult male, original number 100X, collected 27th May 1937 at Paardevlei, Alexandria Dist. (coast), by F. and W. Pannell.

*Co-type* (in the Kaffrarian Museum, presented by the Albany Museum).—Adult female, original number 101X, collected 13th March 1934 at Sundays River Mouth, Alexandria Dist., by O. West.

Dimensions of Type and Co-type.—H. and b., 84 (80); tl., 108 (-); hf. (c.u.) 27 (26); ear, 15 (12?) mm.

Skulls.—Total length, 29.5 (30); basal length, 21 (23); length of palate, 12 (11.5); zygomatic width, 13.5 (-); interorbital constriction, 5 (5.5); width of brain case, 13 (13.5); length of nasals, 11.5 (12); upper molar series, 4.5; lower molar series, 4.5; mandible, 14.5 (15) mm.

This eastern subspecies of G. paeba, from a region far from where any other form of *Gerbillus* is known to occur, approaches most closely in colour some bright orange-rufous specimens in a series of G. p. broomi from Little Namaqualand, but it may at once be distinguished by its almost white flanks, and by the white on the cheeks extending in a broad ring round the eye.

Dr. J. Hewitt, Director of the Albany Museum, who has kindly given me permission to describe this gerbil, records that it was discovered amongst drift-wood just above high-water mark on the east side of the Sundays River Mouth and also on adjacent sand-hills at Paardevlei, Alexandria District.

Genus new to the Eastern Cape Province.